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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/577,345

04/28/2006

Koichi Kusakawa

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EXAMINER

ZEMEL, IRINA SOPJIA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/577,345 | Applicant(s) KUSAKAWA ET AL. | |
| | Examiner Irina S. Zemel | Art Unit 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/28/06, 6/13/06</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 11/14/06</u> . |

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DETAILED ACTION

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent 5,786,403 to Okada et al., (hereinafter “Okada”), or US Patent 4,212,787 to Matsuda et al., (hereinafter “Matsuda”) or US Patent 5,972,492 to Murakami et al., (hereinafter “Murakami”).

Okada discloses compositions obtained by dynamically heat-treating a mixture in the presence of organic peroxide, said mixture comprising:

60 to 95 parts by weight of a peroxide-crosslinking type olefin polymer rubber (a) and 5 to 40 parts by weight of a peroxide-decomposition type olefin plastic (b). The (a) component is disclosed as an ethylene/.alpha.-olefin copolymer rubber, and the (b) component is disclosed as an alpha-olefin homopolymer or

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copolymer. The compositions further contains a foaming agent. See column 2, lines 13-32. In illustrative examples compositions containing 75 % of EPDM and 25 % of PP are reactively kneaded in an extruder with organic peroxide, blended with a foaming agent and foamed. See, for example illustrative embodiment 1 and all illustrative examples.

The reference does not specifically disclose whether the peroxide-decomposition type olefin plastic is present as discontinuous phase in the peroxide-crosslinking type olefin polymer rubber, however, given the respective amounts of the (a) and (b) components and the processing conditions, it is reasonably believed that the (b) component is inherently present in the (a) matrix as a discontinuous phase. It is also noted that the process of obtaining the compositions is substantially similar to the process disclosed in the instant invention, further providing support for the belief that the compositions disclosed in Okada reference inherently exhibit the matrix/dispersed phase structure. The burden is shifted to the applicants to provide factual evidence to the contrary.

Murakami discloses resin compositions suitable for a foam comprising: a branched rubbery olefin based soft resin (C) obtained by a kneading reaction of an organic peroxide crosslinking type olefin based copolymer rubber (A), such as EPT and an organic peroxide decomposing type crystalline olefin resin (B), such as Polypropylene (PP) in respective amounts of 70 parts/30 parts of EPT/PP. See, for example, illustrative example 6, and the entire disclosure. The thus obtained compositions are shaped and foamed. The reference is

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silent on whether the organic peroxide crosslinking type olefin based copolymer rubber (A) is present as a continuous phase as well as the organic peroxide decomposing type crystalline olefin resin (B) is present as a discontinuous phase, however, given the respective amounts of the (A) and (B) components and the processing conditions, it is reasonably believed that the (b) component is inherently present in the (a) matrix as a discontinuous phase. It is also noted that the process of obtaining the compositions is substantially similar to the process disclosed in the instant invention, further providing support for the belief that the compositions disclosed in Murakami reference inherently exhibit the matrix/dispersed phase structure. The burden is shifted to the applicants to provide factual evidence to the contrary.

Matsuda discloses dynamically kneaded composition comprising EPDM (an organic peroxide crosslinking type olefin based copolymer rubber (A)), PP (an organic peroxide decomposing type crystalline olefin resin (B)), and an organic peroxide. The composition is blended with a foaming agent and foamed. See illustrative examples 53-102 and control examples 37-58 disclosing a variety of compositions having rubber, olefin polymer and organic peroxide in different amounts and ratios, all of which are foamed. . The reference is silent on whether the organic peroxide crosslinking type olefin based copolymer rubber (A) is present as a continuous phase as well as the organic peroxide decomposing type crystalline olefin resin (B) is present as a discontinuous phase, however, given the respective amounts of the (A) and (B) components and the processing conditions, it is reasonably believed that the (b)

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component is inherently present in the (a) matrix as a discontinuous phase. It is also noted that the process of obtaining the compositions is substantially similar to the process disclosed in the instant invention, further providing support for the belief that the compositions disclosed in Matsuda reference inherently exhibit the matrix/dispersed phase structure. The burden is shifted to the applicants to provide factual evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/ Irina S. Zemel/
Primary Examiner, Art Unit 1796

Irina S. Zemel
Primary Examiner
Art Unit 1796

ISZ